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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,155

01/13/2005

Ilkka Westman

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EXAMINER

HO, DUC CHI

ART UNIT

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2619

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,155

717
Applicant(s)

WESTMAN ET AL.

Examiner

Duc C. Ho

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1-13-05;8-29-05;8-30-07</u> . | 6) <input type="checkbox"/> Other: _____ |

Specification

1. The abstract of the disclosure is objected to because it should be limited to a single paragraph on a separate sheet within the range from 50 to 150 words.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 42-59, and 61-78 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 42 is incomplete. There appears no correlation between the address checking step "checking if the first type of address is transformable to a second type of address using a first database in the first network", lines 4-5, and the remaining steps of the claim. The same remark applies to claim 61.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 42, 48, 56-58, 60-61, 67, 75-77, and 79 are rejected under 35 U.S.C. 102(b) as being anticipated by the admitted prior art of the instant application, pages 1-4, hereinafter referred to as the APA.

Regarding claim 42, the APA discloses a method for routing a E.164 message from a user in an originating network to a subscriber in the terminating network via a foreign network, wherein the originating network and the foreign network are considered the first and the second network, respectively.

checking if the first type of address is transformable to a second type of address using a first database in the first network (the first network checks whether the E.164 message is transformable to the IMS (IP Multimedia Subsystem) with using the ENUM-DNS database, see page 2, lines 22-25 of the instant application),

checking requirements of message or set of messages or session from the message or message set or session set up request (checking if the IMS identity can be obtained in the target network), and

deciding based on the result of the requirements checking step, on the routing of the message or message set or session setup request (if a valid IMS could be obtained, the message would be routing to an own BGCF, see page 2, lines 27-31),

wherein the session or message set or session set up request is released based on the result of the requirement check in the first network (basing on the step where a valid IMS obtained, the message is released in the first network).

Regarding claim 48, in the APA a S-CSCF performs the requirement checking step.

Regarding claim 56, the APA discloses the first database is an ENUM DNS database and comprises IMS E. 164 identities of the subscribers who have the first network as a home network.

Regarding claim 57, the APA discloses the first database contains E. 164 identities of trusted operators.

Regarding claim 58, the APA discloses the first type of address is an E. 164 identity and the second type of address is a routable IMS identity.

Regarding claim 60, this claim has similar limitations as claim 42. Therefore, it is rejected under the APA for the same reasons set forth in the rejection of claim 42. The second network inherently includes a media gateway element or MGCF. And the message will be routing from the first network to the media gateway to the BGCF.

Claim 61 has similar limitations as claim 42. Therefore, it is rejected under claim 42 for the same reasons set forth in the rejection of claim 42.

Claims 67, and 75-77 have similar limitations as claims 48, 56-58. Therefore, they are rejected under Frymier-Kay for the same reasons set forth in the rejection of claims 48, 56-58.

Claim 79 has similar limitations as claim 60. Therefore, it is rejected under claim 42 for the same reasons set forth in the rejection of claim 60.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 43-44, 46-47, 49-55, 62-63, 65-66, 68-74, 78, and 80-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over the APA, in view of fig. 17.3.2.1-1,

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page 531 of the 3GPP TS 24.228 V5.0.0. March 2002, pp.1-681, (IDS record), hereinafter referred to as the 3GPP.

Regarding claim 43, the APA discloses all claimed limitation, except a step of deriving the address of a contact point of the second network in the first network, wherein the message is forwarded to the second network using the contact point of the second network.

The 3GPP discloses signaling flows for the IP multimedia call control based on SIP and SDP, see figure 17.3.2.1-1, pages 531-556. The S-CSCF#1 is the contact point of the Home Network #1 or the second network.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the APA with the 3GPP. The suggestion/motivation for doing so would have been to provide an efficient interface for service exchange between circuit-switched and packet-switched communications network.

Regarding claim 44, the deriving step could be done using a second database (S-CSCF#1) in the 3GPP.

Regarding claim 46, in the 3GPP the checked requirements include media requirements of the message.

Regarding claim 47, in the 3GPP the checked requirements should include QOS requirements of the message.

Regarding claim 49, in the 3GPP the BGCF performs the requirement checking step.

Regarding claim 50, in the 3GPP the first or second network or another network involved in routing the message or session setup request, includes a Call State Control

Function and a Breakout Gateway Control Function, the Call State Control Function and the Breakout Gateway Control Function being adapted to utilize at least partly different DNS databases for translating an identifier of an equipment indicated in the message or session setup request, into a routing information.

Regarding claim 51, in the 3GPP a Control Function could be configured, preferably a Dividing Gateway Control Function, to perform the requirement checking step and takes care of routing incoming traffic from IP multimedia networks.

Regarding claim 52, in the 3GPP the second network includes a breakout element, preferably a Breakout Gateway Control Function, and an interrogating element, preferably an Interrogating" Call State Control Function, and an additional path is provided from the breakout element to the interrogating element for routing a message.

Regarding claim 53, in the 3GPP when an identifier of the second network includes a valid IMS identity, the message is routed from the breakout element to the interrogating element, otherwise the message is routed to a media gateway element, preferably a Media Gateway Control Function.

Regarding claim 54, in the 3GPP, when the message is routed from the breakout element to the interrogating element, the breakout element is adapted to drop itself out so that the routing is a normal IMS session.

Regarding claim 55, in the 3GPP the contact point is an I-CSCF, BGCF or DGCF.

Regarding claim 59, in the 3GPG the routable IMS identity is a SIP URI.

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Regarding claims 62-63, 65-66, 68-74, and 78, these claims have similar limitations as claims 43-44, 46-47, 49-55, and 59, respectively. Therefore, they are rejected under the APA-the3GPP for the same reasons set forth in the rejection of claims 43-44, 46-47, 49-55, and 59.

Regarding claim 80, in the 3GPP a Control Function could be configured to check requirements of the message, and to decide, based on the result of the check, on the routing of the message.

Regarding claim 81, in the 3GPP the Control Function is a Serving Call State Control Function, S-CSCF.

Regarding claim 82, in the 3GPP the Control Function is a Breakout Gateway Control Function, BGCF.

Allowable subject matter

9. Claims 45, and 64 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Westman et al.(US 2004/0122934); Ferraro Esparza et al.(US

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6,839,421); Ejzak (US 2003/0027595) are cited to show optimized routing between communication networks, which is considered pertinent to the claimed invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Duc Ho

11-28-07



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